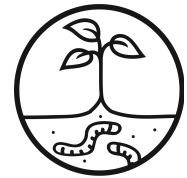


Farmer-Led Research 2019: **Biochar for Apple Orchards**



SOIL HEALTH

Farmer-Researcher(s):

Val Steinmann and Brent Klassen, Heartwood Farm and Cidery - Central

EFAO Contact

Sarah Hargreaves, sarah@efao.ca, 226-582-0626 (chat and textable)

This document outlines the steps that Val and Brent will follow to execute their research project, *Biochar for Apple Orchards*, including design, execution, data collection and data sharing. It also serves as a Memorandum of Understanding between Val and Brent and EFAO.

Background

Val was curious to know if biochar has a chance of helping her head in right direction, with respect to soil organic matter and carbon storage on her farm.

For more information on the project, refer to:

[2018 Research Protocol](#)

[2018 Research Report](#)

Measurements Update

Tree Health

Val used a **tree assessment tool** developed by Lorne Jamieson, which assesses the following 3 factors:

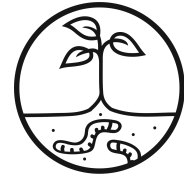
1. **Relative Vitality:** 0-4 for trees with a graft that didn't take; 5-9 for trees with a successful graft.
2. **Relative Insect Pressure:** A no pressure; B some pressure; and C a lot
3. **Leaf Colour:** G green; Y yellow

Val will use Lorne's assessment tool 3 times throughout the season, targeting blossom (mid May), mid-season (late July) and harvest season (mid September).

Soil Health

Val will use the Solvita® handheld field meter to test for differences in soil respiration in August/September. Other soil health measurements TBD.

Farmer-Led Research 2019: Biochar for Apple Orchards



SOIL HEALTH

Research Calendar

Time	Task	Action Item
Blossoming, mid May	Tree health assessment	Sarah will contact Val
Mid-season, late July	Tree health assessment	Sarah will contact Val
Before August	Get Solvita kit to Val	Sarah will bring kit to EFAO office for pick-up
August/September	Solvita test	Sarah will contact Val
Late season, mid September	Tree health assessment	Sarah will contact Val
October 1, 2019	Deadline	Val will submit data and photos

Deadline for data, progress report and photo submission
October 1, 2019

Memorandum of Understanding

Please refer to efao.ca/research-mou for Memorandum of Understanding.

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